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#### UNITED STATES

#### DEPARTMENT OF AGRICULTURE

#### SOIL CONSERVATION SERVICE

FIELD MEMORALDUM #-1083

Re: Soil Survey Inspection and

Correlation

Date: January 11, 1943

#### TO ALL RANKING FIELD OFFICERS:

Attached is a copy of the procedure for soils inspection and correlation developed in accordance with Secretarial Memorandum No. 1020 which transferred Departmental responsibilities for these activities to the Bureau of Plant Industry.

Soil Conservation surveys made by the Service will continue to provide, primarily, the soils and related physical land information needed as a basis for farm conservation planning and will, insofar as possible, include the needs of all other agencies. Inspection and correlation reports, including recommendations for quality and uniformity in classification and mapping will be made to administrative officers of the Service since no administrative direction or supervision over survey personnel nor any changes in field work is involved.

The Bureau of Plant Industry is establishing regional field offices to which most of the inspection and correlation work formerly done in Washington is being transferred. Regional Soil Conservation Survey Supervisors should work closely with BPI regional inspectors to explain the purpose which the surveys must serve in order to meet the needs of our program and assist in developing legends so that the required information can be efficiently obtained and readily interpreted.

Survey work plans are to be initiated by the Service when soil and related physical land information is needed in soil conservation districts and for other areas. Survey field work may be started at the discretion of the regional office upon notice of approval of the first inspection report from the regional inspector. Father than delay the submission of reports when information is lacking or agreement is not reached, they should be forwarded together with the statement indicating when the lacking information will be obtained or the reason why agreement has not been reached.

Your cooperation in carrying out this procedure will facilitate the survey work.

Chief.

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The Bureau of Plant Industry shall be fully responsible for all soils inspection and correlation work undertaken by the Department, and is to inspect all surveys of the Department, or cooperative with the Department, involving the mapping of soil types, phases, and related physical land features to see that the classification of soils and related features is accurate, that the maps and standards of mapping are adequate for the immediate purposes of the survey, and that the work will contribute to the basic soil survey of the United States. The Bureau will inspect surveys of the Soil Conservation Service and other agencies of the Department, will work out, with responsible administrative officers of the other agencies, means to maintain and improve the technical quality of the surveys, will make reports to administrative officers on the quality of the work, and in general will be responsible for developing means to insure uniformity in classification and mapping. The responsibility for soils inspection and correlation assigned to the Eureau of Plant Industry does not involve administrative direction for other agencies. In conducting the inspection work, the Eureau of Plant Industry will cooperate with the responsible State soil survey organizations and with all other agencies cooperating in the surveys.

The Soil Conservation Service will advise the Bureau of Plant Industry of the locations where surveys are to be initiated in its program, recommend the scale of mapping, features to be mapped, and detail of work required, and explain the purposes the surveys must serve in order to carry out its conservation program. The Service will, wherever practicable, have representatives assist the survey inspectors in developing suitable survey work plans and inspection reports for areas in which it has need of survey data.

The Office of Land Use Coordination shall approve survey programs and shall be kept informed of surveys and locations where surveys are approved so that it will be able to advise and consult with other agencies in the Department and agencies outside the Department respecting the survey work of the Department.

# I. Field Inspectors

The survey inspection force of the Bureau of Plant Industry will be organized into four main regional groups, with a Regional Inspector in charge of each who will be responsible to the Chief Inspector in all natters of soil homenclature, definition, and correlation. Each inspector and assistant inspector will be assigned particular subregions by the Regional Inspector.

a/ This memorandum, when approved, supersedes Secretary's Memorandum of September 25, 1937, regarding soil and erosion surveys.

The inspection staff is to see that work plans and inspection reports move along as rapidly as practicable, that surveys are not unduly delayed, and that any unreconciled disagreements in the field are promptly referred to the Regional Inspector. Any disagreements that cannot be resolved by him will be referred promptly to the Chief Inspector, together with adequate explanatory statements. If the Chief Inspector cannot arrange a satisfactory agreement, the problem will be referred promptly to the proper administrative authorities.

### A. Survey Work Plans

A draft of the survey work plan, if practicable, will be prepared by the agency initiating each survey project, forwarded to the other interested agencies operating within the State in which the survey is located, and then submitted to the Regional Inspector. The final work plan will be prepared by the Regional Inspector, or his delegated representative, and returned to representatives of all agencies cooperating in the survey for approval. If approved, each representative signs three copies and retains one unsigned copy. A statement of any disagreements with the work plan will be forwarded to the Regional Inspector who will reconcile the differences among the agencies or, failing to do so, tentatively approve the work plan most nearly adequate in his judgment, and forward the statements of objections to the Chief Inspector.

After tentative approval by the Regional Inspector, a first inspection report may be prepared.

The Regional Inspector will retain one signed copy of the work plan and forward two signed copies to the Chief Inspector. One of these copies will be promptly forwarded by him to the Soil Conservation Service where it is involved in the survey. When approved by the agencies involved, the Chief Inspector will forward a memorandum of approval to the agencies who retained a copy of the survey work plan in the field.

If it is found by the Chief Inspector or representatives of other agencies in Washington that changes should be made in the work plan these will be referred to the Regional Inspector for action looking toward its modification or amendment to the satisfaction of each agency. Failing to reach agreement among the agencies, disagreements will be referred to the proper administrative officials.

Amendments to work plans will follow the same course as an original work plan.

The work plan will contain the following information:

- (1) Name, location, size, and boundaries of the area proposed for survey
- (2) A short paragraph describing the principal physical features of the area
- (3) A list of cooperating agencies (initiating and cooperating)
- (4) Reasons for and uses to be made of the survey
- (5) Type of survey, including mapping scale and features to be mapped
- (6) A list and brief descriptions of previous related surveys
- (7) Transportation and special survey equipment needed, if any, and agencies responsible for furnishing
- (8) Recommended names of personnel to constitute survey party, suggested leader to be in charge of field work, and person to be responsible for report
- (9) Kind, scale, quality, source, and availability of base map, and primary control available in the area
- (10) Date desired to initiate field work, place of first field headquarters, and approximate date when field work will be completed
- (11) Estimated cost of field work by man days, including salaries, travel, and equipment, divided by contributing agencies
- (12) Proposed plan for publication of survey data if agreement reached

# B. First Inspection Report

The first inspection will be made by the inspector or assistant inspector jointly with the chief of the survey party and representatives of the cooperating agen less at any time after tentative approval of the work plan by the Regional Inspector. In the interest of practicability and avoiding unnecessary travel normally the first inspection report will be made only after the survey party chief is assigned for work in the respective area to be surveyed. A detailed plan of soil classification and mapping, including related physical features, will be developed within the framework of the work plan and included in the first inspection report. Of particular importance will be:

- (1) Examination of the base map material in the field and a check of its suitability and quality
- (2) A check on the proposed mapping scale
- (3) Notations on any changes in personnel assigned to the survey
- (4) Conferences with local people interested in the survey
- (5) Preparation of a field legend for the survey as complete as practicable in all details, including a list of all soil types and phases, and related features to be mapped in the survey, together with symbols to be used. (The inspection report will include descriptions of all new foil series and descriptions of all series listed in the leg ad will be included or will be furnished promptly to the field party.)

Great care should be taken to make the first inspection report, which serves as the chief guide to the survey party, as complete as possible, although provision must be made for the inclusion of any important additional soil types, phases or other features not recognized during the first inspection.

The inspector will get approval of the representatives of the cooperating agencies of the first inspection report, or, failing to get approval, attach an explanation of any differences. The inspection report will be forwarded to the Regional Inspector who will approve it or suggest modifications. He will forward two copies to the Chief Inspector in Washington, one of which will be submitted promptly to the Soil Conservation Service if it is involved in the survey. If the policies of the cooperating agency or agencies permit, field work may be started upon approval of the first inspection report by the Regional Inspector, with the understanding that the report is subject to amendment after review by the Chief Inspector and Washington representatives of the interested agencies. The Chief Inspector will advise the Regional Inspector and the field offices of all cooperating agencies of final approval of the first inspection report.

# C. Progress Inspection

During the course of each survey the inspector or assistant inspector will visit the area from time to time in order to check on the progress of the work and its adequacy, the quality of the mapping, and other phases of the work. These visists will be made at reasonably regualr intervals, depending upon the size of the party, the complications of the work, and the competence of the party chief. In addition, he may make progress inspections at the request of one of the cooperating agencies when it is felt that special problems need his more immediate attention.

The progress inspection report will contain statements regarding the progress of the work and include any changes in or additions to the soil mapping legend or the designations of the soil units. At such times he will see that surveyors have adequate up-to-date descriptive legends and that adequate provisions are being made for collecting the necessary soil samples, etc. Approval of the progress inspection report by the Regional Inspector will be sufficient. Then approved by him copies will be forwarded to each of the cooperating agencies in the field and to the Chief Inspector who will transmit one copy to the Soil Conservation Service in Washington if involved in the survey.

### D. Final Inspection

At the close of the survey work of an area, or of a definitely defined unit within an area, a final inspection will be made by the inspector or assistant inspector with representatives of the cooperating agencies. The work will be thoroughly checked for adequacy and accuracy and any portions requiring reworking will be indicated to the field party chief. A complete check will be made upon the suitability of the map material for publication, and upon progress of the necessary soil survey reports. A careful check will be made upon the soil samples that have been collected and those to be collected.

A field correlation memorandum, including a complete list of all soil separations or mapping units shown on the map will be prepared, together with any suggested new series and revisions of established series. If time does not permit the completion of the field correlation memorandum, the final inspection report will include only a complete legend. That is, these two documents will be submitted together if that can be done without unduly delaying the final inspection report.

As with the first inspection report, this final one will be worked out cooperatively with representatives of cooperating agencies and their approval will be indicated or suggested modifications attached. This report will then be forwarded to the Regional Inspector for his review. He will send copies to the cooperating agencies to the Chief Inspector in Washington who will transmit one copy to the Mashington Office of the Soil Conservation Service if involved in the survey.

### II. Correlation

### A. The Field Correlation Memorandum

The field correlation memorandum of an area includes a list of all separations on the map, together with recommended nomenclature, and . descriptions of all new soil series and suggested modifications of established series. This document is prepared by the inspector or assistant inspector in cooperation with the survey party chief and representatives of agencies interested in the survey. In its preparation full recognition must be given to the established classification, nomenclature, and definitions of soil series, types, and . phases, to any local peculiarities of the soils in the survey area, and to available physical, chemical, morphological, and other data regarding the soils. If practicable, this document should be prepared along with the final inspection report and attached to it; but if considerable time is absolutely necessary for its preparation, the final inspection report should be forwarded at once, with a complete field legend, and the field correlation memorandum submitted later.

When completed the field correlation memorandum, together with comments by representatives of the State soil survey organization and other cooperating agencies, is forwarded to the Regional Inspector.

# B. Correlation at Regional Headquarters

After receiving the field correlation memorandum from the inspector, the soil samples, the maps, and the survey report, if any, or descriptive field legend, the Regional Inspector, or his delegated representative, sets a date for a correlation meeting to which all interested representatives of cooperating agencies are invited. Definitions and suggested nomenclature of all soil types, phases, complexes, associations, and groups are carefully checked in relation to standard sample collections and standard definitions, and a suggested correlation memorandum, subject to later review by the Chief Inspector, is prepared. Copies are forwarded to representatives of the cooperating agencies for comments by qualified representatives who failed to attend the correlation meeting. After considering all the evidence and suggestions, the Regional Inspector gives his final approval to the regional correlation memorandum and forwards it to the Chief Inspector in Washington, along with the approval (or statement of objections) of all cooperating agencies. At the same time descriptions of any new soil series are forwarded as well as suggestions for modifications of existing definitions of soil series or other mapping units. Samples are also forwarded to all new soil series and all redefined soil series.

# C. Approval of Correlation by Chief Inspector

The Chief Inspector reviews the regional correlation memorandum in relation to the whole system of soil classification for the United States. He approves it, or makes such changes as are necessary to maintain uniformity of standards in the system of classification. A copy of the approved correlation memorandum will be submitted to the Washington office of the Soil Conservation Service, if involved, and all cooperating agencies will be advised of any changes from the original memorandum as submitted by the Regional Inspector.

### D. Amendments to Correlation

After a final correlation memorandum has been approved, amendments may be proposed to the Regional Inspector, on the basis of any new evidence, and these will be handled as an original correlation memorandum.

Administrator, Agricultural
Research Administration

Administrator, Agricultural Conservation and Adjustment Administration

Rms

Approved\_

Data

Secretary of Agriculture

Www.

